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ABSTRACT

A study examined the effects of statewide performance-based assessment (the Maryland School Performance Assessment Program (MSPAP)) on literacy instruction, administrative support provided to facilitate instructional change, and student and teacher affect in response to change in elementary classrooms. Of the schools in Maryland identified by district-level administrators as making positive instructional changes in literacy in response to the MSPAP, five were selected as research sites due to their disparate approaches to school reform and the diversity of their populations. Information was gathered through semi-structured interviews with building administrators, reading specialists, and teachers in each of the five schools. Primary data sources were triangulated with secondary data sources (i.e., informal conversations with school personnel, state guidelines, school artifacts) and analyzed using constant-comparative methods. Findings revealed that the assessment program did have positive effects on instructional practice, administrative support, and participant affect. (Contains 36 references and five tables of data. A time line of data collection procedures is attached.) (Author/RS)

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READING RESEARCH REPORT NO. 32
Winter 1995

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The National Reading Research Center (NRRC) is funded by the Office of Educational Research and Improvement of the U.S. Department of Education to conduct research on reading and reading instruction. The NRRC is operated by a consortium of the University of Georgia and the University of Maryland College Park in collaboration with researchers at several institutions nationwide.

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Abstract. *This investigation examined the effects of a statewide performance-based assessment (the Maryland School Performance Assessment Program) on literacy instruction, administrative support provided to facilitate instructional change, and student and teacher affect in response to change in elementary classrooms. Of the schools in Maryland identified by district-level administrators as making positive instructional changes in literacy in response to the MSPAP, five were selected as research sites due to their disparate approaches to school reform and the diversity of their populations. Information was gathered through semi-structured interviews with building administrators, reading specialists, and teachers in each of the five schools. Primary data sources were triangulated with secondary data sources (i.e., informal conversations with school personnel, state guidelines, school artifacts) and analyzed using constant-comparative methods (Glaser & Strauss, 1967; Strauss & Corbin, 1990). Findings revealed that the assessment program did have positive effects on instructional practice administrative support, and participant affect.*

Current interest in using statewide assessments for high stakes, such as for curriculum reform or accountability, has met with optimism (Cooley, 1991; Popham, 1987; Popham, Cruse, Rankin, Sandifer, & Williams, 1985) as well as criticism (Bracey, 1987; Ellwein, Glass, & Smith, 1988; Shepard, 1991; Smith, 1991; Smith & Rottenberg, 1991). Proponents of such measurement-driven instruction have suggested that well-developed assessments may be the most cost-effective way of improving the quality of education (Popham, 1987). Some critics, however, have suggested that such practice may lead to a fragmented, narrow, and trivialized curriculum that is deflected from its intended purposes (Bracey, 1987). Others have suggested that measurement-driven instruction implies a behavioristic view of learning, which suggests that basic skills should be taught and mastered before attempting to teach higher-order thinking (Shepard,

1991). Thus, if assessments are to drive instruction positively, they must include tests of higher-order thinking skills.

With increased attention being given to developing national standards for educational reform and in light of the criticism of traditional, norm-referenced standardized tests (Frederiksen, 1984; Hiebert, Valencia, & Afflerbach, 1994; Smith, 1991; Smith & Rottenberg, 1991), enthusiasm has mounted for developing alternative measures aimed at assessing the higher-order cognitive abilities associated with such standards (Nickerson, 1989). Thus, concerted efforts have been made to develop assessments that are more authentic and less susceptible to the criticisms of more traditional, high-stakes measures. *Authentic assessment* has been defined as "assessment activities that represent literacy behavior of the community and workplace, and that reflect the actual learning and instructional activities of the classroom and out-of-school worlds" (Hiebert, Valencia, & Afflerbach, 1994, p. 11). The promise of this form of assessment for high-stakes purposes may be that if tests truly have the potential to influence the instruction that teachers give their students, then an improved assessment that reflects real-world learning and higher-order cognitive processing would lead to improvements in instructional practice.

The Maryland School Performance Assessment Program

The Maryland School Performance Assessment Program (MSPAP) is employing performance assessment as a means of holding schools accountable for students' learning and of reforming the curriculum (Kapinus, Collier, & Kruglanski, 1994; Maryland State Department of Education, 1991). The MSPAP—which is among the newer forms of high-stakes, statewide assessment—was derived as a response to a state mandate for public accountability of schools, school systems, and of the state for its role in student performance. This mandate for change resulted in the formation of a task force commissioned by the governor to develop a set of suggestions for change. This task force produced a document known as "The Report of the Governor's Commission on School Performance" (Sondheim et al., 1989) that became the blueprint for change within the state. Additionally, the Maryland State Department of Education (MSDE) was entrusted with the establishment of a statewide school improvement program that would achieve such accountability (Sondheim et al., 1989). The Maryland School Performance Program (MSPP) was thus established, and the MSPAP became a part of that school improvement initiative.

The purpose of the present investigation was to determine the impact of the literacy portions of the MSPAP on instructional practice. Thus, a description of the literacy outcomes of the MSPAP, implementation procedures, and literacy assessment activities follow. Each component will also be assessed in terms of how its test developers have attempted to provide for concerns about validity (Frederiksen & Collins, 1989; Linn, Baker, & Dunbar, 1991; Messick, 1994).

MSPAP Reading Outcomes

The MSPAP focuses on educational outcomes that Maryland adopted in 1990 and

hoped to attain by the year 2000. The reading outcomes developed for the MSPAP include: (1) demonstrating positive attitudes toward reading; (2) constructing, extending, and examining meaning when reading for literary experience; (3) constructing, extending, and examining meaning when reading for information; (4) constructing, extending, and examining meaning when reading to perform a task; and (5) demonstrating awareness of strategic behaviors and knowledge about reading (Kapinus, Collier, & Kruglanski, 1994; Maryland State Department of Education, 1991). The adoption of such outcomes before the assessment was designed ensures that the performance assessment is construct driven rather than task driven (Messick, 1994; Popham, 1987).

MSPAP Implementation Procedures

The MSPAP has been administered to every third-, fifth-, and eighth-grade student in the state of Maryland since 1991. In 1991, the MSPAP only measured student performance in reading/language arts and mathematics. The following year, social studies and science were added to the assessment. All tasks on the MSPAP are open-ended in nature. Thus, the tasks often require considerable time—up to 90 minutes in some cases—to complete, reflecting the test developers' bias toward depth of processing over breadth of coverage. The issue that arises then is one of construct generalizability (Linn, Baker & Dunbar, 1991; Messick, 1994). That is, if long, open ended tasks are used, students cannot be assessed on every outcome in a given domain, and scores would not accurately reflect students' knowledge. This problem was circumvented by using matrix sampling; no student takes the entire assessment, but the entire assessment is administered to each school. Thus, a picture of how well the school addresses all of the learning outcomes is reported but individual scores are not (Kapinus, Collier, & Kruglanski, 1994).

Reading Assessment Activities

The reading portions of the MSPAP are unique in several ways. The MSPAP uses authentic, unedited texts that include stories, poems, articles, directions, and chapters from trade books. Since the addition of social studies and science in 1992, reading materials also include maps, charts, and directions for hands-on science lessons that are integrated with tasks centered around a common theme. Throughout the MSPAP, students are also given choices: they can select from three or four stories to read; they may have their choice of writing tasks in response to a given selection (e.g., writing a story, poem, or play); or they may have choice in response formats (e.g., drawing or writing) for a question (Kapinus, Collier, & Kruglanski, 1994). The MSPAP also measures students' writing proficiency through longer activities that permit students to use the entire writing process: prewriting, drafting, peer response, revision, and editing. Thus, the assessment tasks are in line with current views of what good instruction in literacy encompasses (Wixson, 1994).

In an attempt to reduce bias and to address issues of fairness (Linn, Baker, & Dunbar, 1991), the developers of the MSPAP began all tasks with preassessment activities designed to fill gaps in students' background experiences

(Kapinus, Collier, & Kruglanski, 1994). Many of these activities provide for student cooperation and collaboration in small groups.

Purposes of this Investigation

While some educational measurement specialists have contended that specialized validity criteria should be established that are sensitive to the expectations of performance-based assessment (Frederiksen & Collins, 1989; Linn, Baker, & Dunbar, 1991), others contend that these specialized criteria for performance-based assessments are consistent with general standards of validity as described by Messick (1989) and further suggest that performance assessments should be held to the same validity criteria as other assessments (Messick, 1994; Moss, 1992). All agree, however, that validation of an instrument requires creating a basis for score interpretation and use (Linn, Baker, & Dunbar, 1991; Messick, 1989; 1994). The concern is that performance assessment may lead to enhanced instructional practice (i.e., consequential validity), and *evidence* may be overlooked as a basis for determining consequential validity. Therefore, we need to know the intended and unintended effects of performance assessment on the variables targeted for change, such as the way teachers think about instruction and the goals of instruction that are set as a result of performance assessment in general (Linn, Baker, & Dunbar, 1991; Messick, 1989, 1994; Tittle, 1989) and the MSPAP in particular (Wixson, 1994). Although positive signs of the effects of the MSPAP on teachers' professional growth have been observed (Kapinus, Collier, & Kruglanski, 1994), the consequences of the MSPAP on instructional practice have yet to be investigated systematically.

Thus, the present investigation examined the effects of a statewide, performance-based assessment (the MSPAP) on three variables: *literacy instruction*, *administrative support for changes in instructional methods*, and *student and teacher affect resulting from changes*. In particular, we were interested in exemplars of positive school reactions to the MSPAP. Therefore, this investigation does not focus directly on any negative school outcomes (for such information, see Afflerbach, Almasi, Guthrie, & Schafer, 1994).

METHOD

Selection of Sites

Sites were chosen during an exploratory research phase prior to the present study (for further information, see Guthrie, Almasi, Schafer, & Afflerbach, 1994). The first step of the selection process involved interviewing a representative from each of the 24 school districts in Maryland to determine the types of innovations occurring within their districts as a result of the MSPAP and to identify schools within each district that were exemplars of positive change. (Representatives from 21 of the 24 school districts in Maryland were actually contacted.) These representatives were employed by their respective Board of Education offices and held positions such as: Supervisor of Reading (n = 5), Supervisor of Elementary Education (n = 5), Supervisor of Instruction (n = 3), Supervisor of Language Arts (n = 3), Director of Curriculum (n = 2), and (one each) Reading Specialist, Principal,

and Coordinator of Chapter 1 and Testing. These individuals were sent letters stating the purpose of the research project, describing their role in the project, and including the questions that would be asked during the interview.

The structured interview consisted of 13 items that were drafted by a team of four researchers. The primary goal of the interview was to identify one or two schools within the district that were initiating changes in response to the MSPAP. A secondary goal was to determine what types of changes were occurring at the county level in response to the MSPAP. Interviews were conducted by telephone, and each representative was asked the entire set of questions. Responses were recorded as fully as possible by hand.

Forty-two elementary schools were nominated by the 21 county representatives. Demographic data regarding the characteristics of each school and the types of innovations being initiated in each school were recorded. Types of innovations were determined using constant-comparative methods; innovations were inspected initially to gain a holistic sense of the data.

Five categories of innovations emerged: (1) integrated curriculum (n = 11, 26.2%), (2) literature-based instruction (n = 6, 14.3%), (3) principal as strong leader in initiating change (n = 6, 14.3%), (4) strategic instruction (n = 5, 11.9%), and (5) emergent literacy programs (n = 3, 7.1%). The innovative practices from 11 of the schools (26.2%) did not fit into this categorization system and did not warrant the creation of additional categories because each innovation was unique. Innovations in the 11 other schools included practices such as scoring holistically on assessments, making grouping changes, employing an ungraded curriculum, using computers, conducting summer reading programs and community-based reading programs, writing grants, and attending to the needs of English as a Second Language (ESL) students. These innovations were often features of—and subordinate to—the larger programs operating in the other schools and thus were not included as separate categories.

Table 1 displays the demographic data from the 42 nominated schools with respect to racial composition, socioeconomic status (SES), size of school, whether the school received Chapter-1 funding, and type of innovation initiated.

Five schools were then selected for participation in the investigation, based upon type of innovation and demographic characteristics. Schools were selected by a team of researchers familiar with the results of the exploratory study. The 31 schools representing the five types of innovations were separated by category. Within each category, schools were prioritized by demographics. We were especially concerned with attaining information on how schools with at-risk populations were initiating change, so, within each category, schools with large minority populations, urban populations, lower SES, or Chapter-1 funding were given priority. Of the five schools that were selected, two served predominantly minority populations, and three served predominantly white populations; two were in communities with low SES, one with middle SES, one with middle/high SES, and one school served a high-SES community. Two schools received Chapter-1 funding; two had student populations over 800; two had between 401 and 600 students; and one school had 300 students.

Table 1. Demographic Data for Schools Nominated.

Characteristic	Number of Schools	Percentage of Total
Racial Composition*		
Predominantly white	35	83.0
Mixed	3	7.1
Predominantly minority	4	9.5
Socioeconomic Status*		
Low	7	16.7
Low/Middle	7	16.7
Middle	16	38.1
Middle/High	3	7.1
High	3	7.1
Range of SES	6	14.3
Chapter 1 Funding*		
Yes	24	57.1
No	18	42.9
Number of Students**		
200–400	11	29.7
401–600	19	51.4
601–800	5	13.5
>800	2	5.4
Type of Innovation*		
Integrated curriculum	11	26.2
Literature-based curriculum	6	14.3
Principal as strong leader	6	14.3
Strategy-based instruction	5	11.9
Emergent literacy program	3	7.1
Other	10	23.8

*percentages based on data from 42 schools
**percentages based on data from 37 schools

Sites and Participants

School A

The community. School A is one of 118 elementary schools in an urban public school system. The school is situated amidst hundreds of government-subsidized public housing units, several hundred of which are vacant. The residents of the community are almost exclusively African American and have a low SES ($4,255 per-pupil expenditure; 68% participate in the free/reduced lunch program). Table 2 displays information regarding per-pupil ex-

Table 2. Demographic Characteristics of School Sites Selected for Participation.

	School				
Characteristic	A	B	C	D	E
Per-Pupil Expenditure	$4,255.00	$5,549.00	$4,396.00	$4,191.00	$6,629.00
Participation in free/reduced lunch program	68.0%	5.0%	26.0%	3.0%	60.4%
School population	296	500	598	804	813
Caucasian	0.0%	97.0%	72.0%	92.0%	17.1%
African American	99.7%	3.0%	28.0%	8.0%	29.6%
Latino	0.03%	0.0%	0.0%	0.0%	44.8%
Other	0.0%	0.0%	0.0%	0.0%	8.4%

*Information obtained from Maryland School Performance Program Office (1990)

penditure and the percentage of students participating in the free/reduced lunch program in each school. This information, combined with interviews with school personnel, was used to determine the SES of each school.

The school, student body, and staff. School A is an aging, two-story brick building. Windows of cloudy Plexiglas and locked iron doors guard its exterior. Rows of metal lockers line the walls of the main hallway. The media center is located on the second floor of the building, away from the flow of traffic; the interior of the media center contains many round wooden tables, some chairs, and large bookshelves with ample room for more books.

The school's population consists of 296 pre-kindergarten through fifth-grade students, the majority of which are African American (see Table 2). At the time of the interviews (February, 1993), the school was scheduled for closing due to declining enrollment. School A was selected primarily because it represents an inner-city school attempting change amidst a myriad of typical urban problems. During interviews with school officials we learned that many of the students came from low-SES homes with undesirable living conditions; several were homeless. The school receives Chapter-1 funding.

The school's curricular changes center primarily around its emergent literacy program. The person who was the catalyst for much of the change—the school's speech/language therapist (the school does not have a reading specialist)—was unavailable for the interview. Arrangements for the interviews with faculty members were made by the building administrator, who held a doctoral degree

in educational administration and who was interested in reading education. The interviews were confined to one in-service day at the principal's direction. Using an in-service day avoided encroaching on teachers' normal planning times and probably meant they were more willing to share information.

School B

The community. School B is located in an affluent suburban area and lies at the center of the Baltimore-Washington corridor. The surrounding neighborhoods consist of housing developments containing large, single-family dwellings with well-manicured lawns. Parents are actively involved in all school events, and 95–98% of the parents attend report-card conferences. Many of the parents are highly educated and are vocal with respect to the changes that are being made in the school's curriculum. As indicated by Table 2, a high per-pupil expenditure ($5,549) and a lower percentage of students participating in the free/reduced lunch program (5%) attests to the high SES of the community surrounding School B.

The school, student body, and staff. School B is a modern, brick building with a few tall, tinted windows. It is one of 28 elementary schools in the district. The school sits one-quarter mile off the road, surrounded by woods and an ample playground containing bright blue and yellow play-sets. Upon entering the school, one is greeted by bright red carpeting; poster depicting large yellow pencils boldly proclaim, "School B: Sharp Minds at Work." The media center is located at the center of the school and has no doors; one must pass through the media center to get to the other side of the school. Dozens of student-made dioramas depicting scenes from children's literature decorate the tops of the bookshelves, which are brimming with a multitude of selections.

The 500 students of School B are predominantly Caucasian (see Table 2). School B was selected as a school with a principal who was a strong leader in instructional change. This fact was apparent in the comments of county officials and faculty members, as well as in the actions and professional activities of the principal. She had been a reading specialist for nine years, had presented workshops on effecting school change to other administrators across the state, was very active in professional organizations such as the Association for Supervision and Curriculum Development (ASCD), and held a doctoral degree in educational administration.

School C

The community. School C is located in southern Maryland in one of five Maryland counties that make up the Washington-Maryland-Virginia metropolitan area. The school is located in a suburban, yet slightly rural, community. Modest, single-family dwellings are, located nearby but are not visible from the school. Residents of the community are employed in a variety of occupations and range from military personnel to educators to executives. Most residents, however, are of medium SES (see Table 2), and many of the students come from single-parent homes. Parents and community members are eager to be involved in school events.

The school, student body, and staff. School C is a brand new public school that opened for the 1992–93 school year. Modern in appearance with state-of-the-art facilities, it is one of 16 elementary schools in the county system. School C is located on a huge tract of open, flat land, and the only visible structure nearby is the high school, which is one-quarter mile in front of the school. The 598 students (kindergarten through grade five) who attend the school are predominantly white (72%) and are of medium SES (see Table 2). The school also houses special education students with emotional adjustment problems.

The principal had her master's degree in educational administration and was passionate about creating a staff that had a vision for the future of the school and that emphasized communication. School C was selected because it featured an integrated curriculum. Literature-based instruction was integrated throughout the content areas as well as portfolio assessment programs.

School D

The community. School D is located in northeastern Maryland and is part of the Baltimore metropolitan area. It is located in an upper-middle-class suburban neighborhood consisting of single-family homes. Parents in the community hold a variety of occupations ranging from physicians to truck drivers; however, most hold white-collar, executive positions in the community. Parents are interested in their children's education, as was shown by the support of the Parent Teacher Association in providing funds for additional items.

The school, student body, and staff. School D was built in 1990 as a pilot site for a curriculum that was entirely literature-based. The school enrolls 804 students (kindergarten through grade five), 92% of whom are white and are primarily upper-middle SES (see Table 2). The school is an expansive brick building. The spaciousness of the surrounding property and within the school itself is striking.

The principal had his master's degree in educational administration and was interested in making a literature-based program succeed. In fact, the school was selected because its curriculum was entirely literature-based. In preparing for the opening of the new school in 1990, faculty members from 23 elementary schools in the county were interviewed. A diverse staff was chosen, including some members who came from very traditional, basal reader programs featuring homogeneous grouping and structured activities. Some staff members came from literature-based reading programs in which trade books and flexible grouping patterns were used. This diverse staff had to quickly congeal and adapt to a new school where no basal readers were purchased and where trade books and thematic teaching would be expected. Also, the school opened without a functional media center. In spite of this difficulty and the diversity in teaching experiences among staff members, county and school officials said that faculty members generally accepted the literature-based curriculum. This intriguing factor was another reason for selecting School D as a research site.

School E

The community. School E rests on the border of the Washington D.C. metropolitan area and is located in a suburban neighborhood consisting of single-family dwellings and mid-rise apartment buildings. School E is one of 118 elementary schools in a county whose per-pupil expenditure ($6,629) is one of the highest in the state of Maryland (see Table 2). Small commercial centers occupy the areas on the periphery of the residential communities. The residents served by this school are primarily Hispanic and African American and have a low SES; many are immigrants with little education and limited English proficiency. Residents are often employed in unskilled labor occupations and live in tiny homes with no furniture and no printed material. Many will move after a short time, resulting in a very transient population.

The school, student body, and staff. School E is a large, two-story, modern building that houses 813 students from preschool through sixth grade. The school was funded as an International Magnet School, meaning that students of culturally diverse backgrounds and students who are non-native English speakers attend the school. They come from many communities around the county. School enrollment data attest to the diversity of the student population and the low SES (see Table 2). The school curriculum includes a half-day Spanish Immersion Program in which 32.5% of the students participate.

The school made innovations related to strategic instruction as well as to serving its multicultural population. Because the school is an International Magnet serving a population quite distinct from the remainder of the county, it is supported by several federally-funded programs (Head Start, Chapter 1) and county-funded resources (e.g., curriculum coordinator, parent coordinator, ESL teachers) that are not available to other schools in the county. In hiring faculty members, the principal considers several factors, including candidates' energy level, whether or not they can manage a classroom effectively, and whether they have experience working amidst cultural diversity (e.g., in the Peace Corps or teaching abroad) or have extensive travel experience so as to be aware and tolerant of cultural differences. The principal is a former reading specialist who reads extensively about educational research on policy as well as practice and who holds a doctoral degree in educational administration.

Interview Protocol

The eight-item semi-structured interview used during the school-based interviews was developed by a team of four researchers familiar with educational measurement, assessment, classroom procedures, and the MSPAP itself. Many of the items were similar to those asked of county representatives during the exploratory research phase. Before the actual interviews, questions were piloted with teachers and administrators who were not in the sample of interest. Alterations based on the information collected during pilot interviews guided the construction of questions.

Three types of information were of primary interest: (1) the goals of the MSPAP and its impact on literacy instruction, (2) the manner

in which changes/innovations were facilitated, and (3) the challenges that were encountered in attempting to make changes. The focus of the present investigation centers on the effect of the MSPAP on literacy instruction and the ways in which such changes were facilitated. (See Afflerbach, Almasi, Guthrie, and Schafer [1994] for reports of challenges encountered as such changes were implemented.)

The interview consisted of the following eight questions:

1. What is the goal of the Maryland School Performance Assessment Program (MSPAP)?

2. What do you think the MSPAP measures in terms of reading performance?

3. How would you describe the instructional changes that have occurred in your school in relation to the Reading and Language Arts portions of the MSPAP?

4. What impact has the MSPAP had on your school that we have not already discussed?

5. Where did you get ideas for these changes?

6. What resources do you have for making these changes?

7. What materials do you use to assist students as they prepare for the Reading/Language Arts portions of the MSPAP?

8. What barriers (if any) did you face in trying to make these changes?

Data Collection and Analysis

Data Collection

During the interview procedures, the researcher functioned primarily as an inquisitor and as a facilitator of group process, asking only the interview questions and probing when answers were unclear, vague, or brief. All interviews were audiotaped, and brief field notes were taken at each of the research sites; field notes were fleshed out later. Thus, primary data consisted of field notes and audiotaped interviews collected during one- or two-day sessions in each school throughout a three-month period (see Appendix). All interviews with school personnel were arranged by the building administrator prior to the day data were collected. Interviews were conducted with building administrators (e.g., principals, assistant principals), curriculum specialists (e.g., reading specialists, curriculum coordinators, supervisors), and teachers (third-grade teachers and fifth-grade teachers). These individuals were interviewed because each had diverse and expert knowledge about the construction and administration of the MSPAP and about how instructional change was achieved in their school. All interviews were conducted in private rooms and were recorded on audiotapes that were later transcribed in their entirety.

Data from school administrators and curriculum specialists were collected individually; but teams of third-grade teachers and teams of fifth-grade teachers were interviewed in small-group settings so that teachers could converse openly. This procedure was piloted during the preliminary research phase and was found to

be effective at reducing teachers' anxiety about the interview process. Also, teachers often embellished the comments of their colleagues to create a richer picture of the curricular changes they were describing.

Data Analysis

Primary data sources consisting of transcribed interviews and field notes were triangulated with secondary sources that included: (1) informal conversations with school officials (county supervisors and building administrators); (2) state documents (Maryland School Performance Program Results); and (3) school artifacts, including school enrollment data and instructional materials used by teachers in the schools. The data were analyzed using the constant-comparative method (Glaser & Strauss, 1967; Strauss & Corbin, 1990). The analysis procedure consisted of listening to the audiotapes and rereading field notes and transcripts of interviews to gain a holistic sense of the data. Three copies of the transcripts from each interview ($n = 22$) had been made so that highlighting and coding could be done. Transcripts were then read thoroughly, and portions that addressed each of the interview questions were highlighted and coded. Highlighted portions representing information pertinent to each question were then copied onto data sheets for each interview. The intact copies of the transcripts, as well as the original audiotapes were often referred to throughout the process.

Initial categorizations were established with respect to each of the interview questions; these were supplemented by assertions regarding linkages between the information gleaned from each school as well as information gleaned from all five schools. (Two researchers reviewed the data several times.) This process helped reduce the problem of premature acceptance of categorization systems. During the categorization process, properties emerged that added to the conceptual density of the categories (Strauss & Corbin, 1990). Once the categories seemed fully saturated, the data were revisited in order to test the categories, properties, and dimensions. This analysis allowed conclusions to be drawn both within the five sites and across the five research sites regarding the effect of the MSPAP on instruction, the means of achieving instructional change, and any barriers to change that might exist.

RESULTS AND DISCUSSION

The major implication of the data collection and analysis is that the MSPAP did have a direct influence on the types of instructional changes taking place in all five schools. The categories that supported this assertion were found in response to questions related to (1) the types of curricular changes occurring in these schools and (2) how change was facilitated in these schools. A third category emerged that was not directly linked to a specific question but which emerged as a result of consistent reporting across all schools, primarily as respondents were addressing issues related to questions three and four of the interview protocol. This final category, then, related to (3) the effects instructional changes have on the students who experienced them and the teachers who were responsible for implementing those changes. Thus, the categories include (1) realignment of curriculum, materials, and classroom cultures to match features of the MSPAP,

Table 3. Properties and Dimensions of Instructional Change in Schools

Properties (Dimensions)	Schools A	B	C	D	E
Level of congruence	low	med-high	high	high	high
Speed of implementation	slow	gradual	undetermined	grad/abrupt	gradual
Degree of change	varied	little	varied	varied	varied

(2) professional support at the district/county level and school level for teachers to facilitate change, and (3) affective changes in students and teachers. Evidence in the form of interview comments and supporting documents will be presented to illustrate how each of the three categories supports the major assertion. Since each school attempted change differently, however, a description of how change was achieved at each school will be provided before the discussion of each category.

Achieving Change

Interviews with school personnel in each of the five schools provided consensus that instructional practice in their schools was affected by the MSPAP. This change, however, did not occur in the same way in all schools. Closer examination of the interview data revealed that three properties of instructional change existed in each school: (1) the level of congruence between the MSPAP and instructional practice and curriculum, (2) the speed with which change had been implemented, and (3) the degree of change experienced by the faculty. Based on interview comments, each property was then dimensionalized. Table 3 illustrates the ranges of variation that were possible within each property, as well as each school's profile.

School A

According to school personnel, School A produced minimal amounts of instructional change after the first administration of the MSPAP. The MSPAP and the school's curriculum appear to have been somewhat aligned. However, congruence varied from classroom to classroom. As the principal noted:

> There's an awareness that we've got to make some changes, but to be perfectly honest the school is judged still by the Comprehensive Test of Basic Skills (CTBS), which is the traditional multiple-choice test, and I've even told my staff members, "We've got to make some changes for the MSPAP, but remember when the results are published in the newspapers they are looking at the CTBS—and that's important. So I guess we're more at an awareness level.

The principal's implication that students' performances on the CTBS were more important than the need to produce change based on the MSPAP was substantiated during visits to classrooms. Much shelf space was taken up by "Scoring High" booklets (CTBS test preparation booklets). When questioned about their use of the booklets during class time, teachers said that students would be doing a little bit of practice in the booklets every day until the CTBS was administered in April. Since these interviews occurred on January 25th, (see Appendix), a good bit of time was probably spent in preparation for the more traditional, standardized assessment.

The school did, however, experience some change as a result of the MSPAP, although change was slow. The principal noted that, "Some [teachers] are making a lot of changes [as a result of the MSPAP]; some are making minimal changes; maybe one or two haven't made any changes." This variation among teachers was apparent during interviews with the third- and fifth-grade teachers. The teacher responsible for teaching the gifted and talented pull-out program was interviewed with the third-grade teachers. She explained that she creates thematic units with the trade books she uses. She also noted that she uses *Reader's and Writer's Workshops* in her classroom. Interviews with the fifth-grade teachers revealed differences in the curriculum for the gifted and talented students and for others.

School B

The level of congruence between the curriculum at School B and the MSPAP ranged from medium to high; change occurred gradually over a period of years. The reading specialist had noticed several disturbing aspects of students' literacy behaviors and had begun to suggest that changes occur just prior to MSPAP, according to the principal:

> [The reading specialist] said, before all of this [the MSPAP] ever came out four years ago [that the] kids were basically not liking to write. They could read, but when it got to the writing, or responding to tasks, or incorporating higher level thinking skills, they weren't doing it, and you couldn't measure it. We were having a hard time, and dittoes were overkill. We had to get rid of them. Kids were tired of reading out of basals. It was turning them off.

The suggested changes were congruent with the MSPAP, as is reflected by the reading specialist's comment:

> My feeling is we are finally headed in the same direction. We're moving forward together—the curriculum reflects the state outcomes—for once we have an instrument that reflects what we're doing in the classroom.

This statement, coming from someone who works with the entire faculty, suggests that the curriculum as a whole is aligned with the outcomes of the MSPAP. The comments of the fifth-grade teachers support the reading specialist's view:

> Somebody said [to me], "Are you going to prepare your kids [for the MSPAP]?" and we looked at them and we said, "We don't need to—our kids have been prepared since September!" This is the first year that when

> our kids sit down and take the test it's like they've done this all year long.

Thus, the changes in School B began about four years ago (1989) and have evolved in varied ways over the years.

School C

The high level of congruence between the curriculum at School C and the MSPAP is attributed to the fact that it was a brand new school. The principal noted that she had had an opportunity to meet with the central office support staff to plan her school's curriculum so there would be a match between her ideals, the county's ideals, and the state's ideals:

> We had the opportunity . . . to . . . take some risks and develop some of the things we wanted to start. So, I had an advantage over some other schools because I was forming a new school; and we bought into this [the outcomes that the MSPAP is based upon]—from the central office support staff, from research, from information across the state—all of these things were guiding us too, but in our hearts, as educators, we knew this was the way to go.

This high level of congruence is apparent in the remarks of a fifth-grade teacher:

> When we take the Maryland test [the MSPAP], I don't even think they're [the students] going to realize it's a test because it's our normal day-to-day thing going on—here's your group, your materials, solve this problem. The only thing different is it's going to be collected and count for something somewhere, and they don't get it back.

Because the school was new, it is difficult to know how fast changes were implemented. However, the principal said the degree of change varied from teacher-to-teacher, and that all teachers were experiencing some change because they were creating a new curriculum that in many ways was aligned with MSPAP.

School D

School D also is a relatively new school. Its experiences are unique in that, at the time the MSPAP was coming out, the school was being built. This meant that teachers with varied backgrounds from around the county had to meld into a cohesive unit. All of the individuals interviewed, however, agreed that their curriculum was intended to be well-aligned with the MSPAP. The comments of the third-grade teachers, who had brought portions of their county language arts guide with them, reflect this congruence:

> Most of the ideas [for changes] come from the county level where we have been given guidance from the committee developing an Integrated Language Arts Guide. This is directly in line with MSPAP. In fact, I have pieces of it here. On Tuesday, we had a meeting on Program Outcomes to make sure that we were in line with the state [outcomes]. We [the school] are even trying to get in line with national, state, and county outcomes.

Apparently, change is occurring among all teachers, but the speed and degree to which this has happened varies, most likely because reforms coincided with the school's opening. Changes taking place in School D were ap-

parently complicated by the demand that people from varied backgrounds make curricular change. The principal described this delicate situation best:

> When we opened, we pulled staff members from 23 different schools. Some came from a very strict, structured basal program where you had 60 minutes for reading, and then reading is over. Then you clear your desk because it is time for reading comprehension. It [the basal program] even told when to close your book and do your spelling. Others came from schools, and my previous school was one of them, where we had a literature-based program, and we had trade books, and we were using a modified grouping plan across grade levels. There was a fairly wide range of change necessary when this school opened so it is hard to say what change occurred in the last three years. For some people there were quantum leaps in change because they had to go cold turkey on the dittoes, and workbooks were no longer ordered . . . . We have had to provide varying amounts of support.

Some of the teachers felt that because School D was intended to be a model school—one reflecting the latest curricular innovations that were based in part on the MSPAP—that changes were being thrust upon them without adequate preparation. The teachers' frustrations are evident in this teacher's comments:

> This school was created about the time that MSPAP was created, and though we all were coming from different places where we were doing different things, we weren't really making a transition as a school. We had pretty much started from ground zero, and as we say it, as MSPAP was being thought up, the school's new curriculum was being thought up, and we were being swept along. So I know I still feel like we are flying in an airplane, and we are all still trying to put the wings together.

The same teacher also felt as if the changes that were being made were abrupt. He had come from a basal school and in one summer had to make changes:

> [Making changes with a new school] is a lot different than I think [it would be] if you came from a school where they were working in the basal five years ago, and now were working toward literature and making a gradual transition. We made a sudden change.

The reading specialist's comments also reflect the frustration that went with making changes; however, she notes that although change may have been abrupt initially for some teachers, they gradually grew into their new roles:

> A lot of different things are happening in this school right now, and I see people much more at ease with it now . . . . I think the thing that is interesting to me is to watch the change . . . at the beginning for a lot of people it was a major shift in the way they think about reading, writing, and children. As they've gotten into it and had this experience, as well as listening to other people, and reading, they are growing, and you can see that reflected in the work they are doing because it shows in the progress of the children.

Although genuine change seems to have occurred within School D, it seems that the speed of implementation and the degree of change varied.

School E

School E has made definite changes in a thoughtful, gradual manner. The former curriculum coordinator at the school had worked closely with the Maryland State Department of Education as the MSPAP was being developed and was aware of the changes that were coming before the MSPAP was first administered. The principal noted that many of the changes at the school were a result of having a forward-thinking curriculum coordinator who foresaw the changes and began putting them into place before the arrival of the MSPAP. The teachers were very well-informed about these changes and how they came about, as evidenced by their comments:

> [We] knew what the trends in education were going to be. We knew about Writer's Workshop and some of these things we have been implementing, not only for the past two years, but for many years. So, changes in the curriculum have not happened overnight. It has been something very gradual.

The innovations to curriculum have been built on a solid foundation of theory and research. The changes appear to have been communicated clearly to faculty members since curricular innovations were consistent among faculty members, all of whom were well-informed about current theory and practice.

While the unique ways in which five schools made changes have been described, the discussion that follows provides converging evidence as to how the MSPAP affected the types of changes made, how these changes were made and how affective behaviors changed as a result.

Realignment of Curriculum, Materials, and Classroom Cultures to Match Features of the MSPAP

The authors hoped that by interviewing a number of knowledgeable individuals within each school, a complete picture of the types of changes would emerge. For this reason, the comments made by teachers and administrators concerning instructional changes were categorized as follows: *nature of students' instructional tasks*, *instructional methods used by teachers*, *texts used*, *learning environment in the classroom*, *assessment*, *organization and planning*, and *test preparation*.

All schools, and all individuals within each school, reported that the nature of instructional tasks designed for students and the instructional methods used by teachers have changed as a result of the MSPAP. Similarly, there is evidence that the types of texts used in the schools and the learning environment in the classroom have changed as a result of the MSPAP. To find out how the MSPAP has affected instructional change, the four types of changes that provided converging evidence between and across all five schools will be discussed in more detail: (1) the nature of instructional tasks used in the classroom, (2) teachers' instruction-

al methods, (3) texts used, and (4) the learning environment.

Nature of Instructional Tasks

Although the teachers and administrators described many instructional tasks that were introduced as a result of the MSPAP, three facts about these tasks emerged repeatedly across all schools and interviews: (1) students had more opportunities to write; (2) there was more emphasis on personal response to reading, and (3) students had more choices in both reading and writing. Each type of task will be described more fully and evidence provided in terms of interview comments and supporting documents that link the changes to the MSPAP.

Increased writing opportunities. Teachers in all schools indicated that writing is emphasized more since the inception of the MSPAP. After reading, students are frequently asked to respond to writing prompts, write in response or dialogue journals, or to do prewriting, drafting, revising, proofreading, and sometimes publishing. One third-grade teacher at School E noted:

> I would say the greatest change that I have made has been in the writing aspect. Such a focus has been put on writing, and writing from prompts, and writing connected to every aspect [of the curriculum], that practically every breath they [the students] take they write about . . . the kids are starting in kindergarten, by the time they get to third grade they are better writers than they have been in the past.

The increased emphasis on writing may be directly linked to the Writing Outcomes as described in the Maryland School Performance Program (1991):

> The students will develop as writers through frequent writing experiences and many opportunities to interact with each piece of writing, having had occasions to prewrite, draft, revise, and proofread. (p. 29)

Another clear trend appeared to be that students were expected to organize their thinking through the use of graphic organizers such as story maps and Venn diagrams. Teachers used the organizers in a variety of ways—some in the prewriting phase of the writing process, and others in helping students organize information when critically examining a text (i.e., comparing and contrasting characters). The reading and language arts portions of the 1991 MSPAP required students to use graphic organizers in similar ways (Maryland State Department of Education, 1991).

Some schools indicated that they were involved with process writing prior to the 1991 administration of the MSPAP. However, the teachers and administrators in these schools agreed that the amount of writing has increased since the MSPAP and that the integration of writing across the curriculum was linked to the MSPAP. This change may not be a result of the 1991 MSPAP—which only included subtests on reading, writing, and mathematics—but it may be a result of the 1992 MSPAP, which did include subtests on social studies and science that relied heavily on writing as a means of assessment (Field Observation of MSPAP Test Administration, May, 1992). The reading specialist at one school noted:

> We're doing a lot more writing . . . we did a lot with the writing process—Writer's Workshop— prior to MSPAP. Now we have added onto that, training teachers how to write prompts in response to literature assignments, prompts in science. We're trying to do that in all areas and integrate writing into all the content areas as well as reading.

Emphasis on personal response to reading. The Reading Outcomes Model of the Maryland School Performance Program (1991) suggests that students should be able to read a variety of texts for a variety of purposes (italics added for emphasis):

> For example, students should be able to demonstrate that they can orient themselves to read for *literary experiences* (novels, short stories, plays, etc.), to be informed (content texts, articles, editorials, etc.), and to perform a task (following directions, etc.). Additionally, readers interact in different ways with text. Students should be able to demonstrate their ability to interact through four reading stances: global understanding (i.e., initial impression), developing interpretation (i.e., more complete understanding by revisiting the text), *personal reflection/response* (i.e., subjective consideration as it relates to personal knowledge), and critical stance (i.e., objective consideration of text) in order to construct, examine, and extend meaning. (pp. 19–20)

Most schools and teachers in these schools said that an emphasis on personal response was an outgrowth of the MSPAP. Tasks that encourage personal response included both oral and written responses. According to some third-grade teachers at School B:

> They [the students] have time to read everyday. Sometimes we'll do reading workshop where they'll have a period of 20 to 30 minutes to just sit there and read, and then they'll do journal writing about that particular book.

These activities reflect the Reading Outcomes Model of the MSPP in that students are provided with extended periods of time for reading (i.e., orienting themselves to read for the literary experience) and then are provided with time to respond to what they have read in their journals (i.e., the personal reflection/response stance). Additionally, students are responding to texts orally.

Student choice in reading and writing. Teachers and administrators in most schools said that giving students choices of reading and writing material is a direct response to the MSPAP. One fifth-grade teacher at School B explained that after she introduces a number of theme-related books to her students through a book talk, she provides for student choice in reading:

> [If] I have four novels going in my classroom, the kids will make three choices. I always try to place kids with their first choice, but I do not like to have groups smaller than four, and I don't like to have groups larger than eight [reading the same novel]. So [the students] may get their second choice and read their first choice novel on their own. Those groups will meet at literature circle time to discuss their novel.

Other teachers described choice in reading and writing as options available to students in response to what they are reading. For example, students may choose to read another book by the same author or they may choose to write a letter to the author or write a poem or write a sequel to the novel as their response to what they have read.

Although choice is not specifically outlined as a reading or writing outcome in the Maryland School Performance Program, choice is provided for on the assessment itself (Maryland State Department of Education, 1991; Field Observations of MSPAP Administration, May, 1992). Both third- and fifth-grade students are given choices of texts to read on different portions of the assessment, as well as a choice of type of written response. Thus, it seems that the inclusion of student choice in instructional activities is a direct outgrowth of the MSPAP.

Instructional Methods

Schools were originally selected as exemplary schools that employed a specific type of instructional change, but in all schools three instructional methods were being implemented to some degree: (1) thematic, literature-based reading instruction that develops students' strategic awareness, (2) writer's workshop, and (3) integrated instruction.

Literature-based instruction that develops strategic awareness. Teachers and administrators in each school said their instruction was literature-based and included strategic instruction as well. The fifth-grade teachers at School C described their instructional program as follows:

> T1: We're using an integrated approach with thematic units. We work [in] the types of skills and strategies that are headed in the direction we need to go and that are covered by the MSPAP.
>
> T2: Working on strategies instead of discrete skills is a giant difference in the way things were prior to MSPAP.

Teachers in most schools also said that including strategic instruction was a substantial change. Third-grade teachers at School D described the instructional changes they have made: they now focus not only on *what* they teach but *how* they teach it:

> T1: Instructional changes I think we have are that the children [are] writing in response [to what they read] and dealing a lot with strategies—teaching them the BDA—what you do Before, During, and After [reading], and teaching them ways to use their reading skills when they are not in reading group.
>
> T2: I know that my teaching style has changed. I do think-alouds, and I model. I sit down and I will say, "I have to write a note here." I will sit down and when it is time for silent reading . . . [previously] when they [the students] were all reading I was doing this and that because I had to get it done. Now I sit down and read. I will start laughing out loud, and I know I didn't do that before. So, I think that has changed my whole teaching style. It is modeling for them . . . .

These instructional changes and methods are reflected in the Reading Outcomes Model of the Maryland School Performance Program

(1991) in that one of the reading outcomes is directly related to strategic behavior:

> Students will demonstrate their ability to construct, extend, and examine meaning for a variety of texts by using strategic behavior and integrating both their prior knowledge about reading and topic familiarity. (p. 21)

Writer's workshop. As noted earlier, the Maryland School Performance Program's Writing Outcomes include provisions for the writing process:

> The students will develop as writers through frequent writing experiences and many opportunities to interact with each piece of writing, having had occasions to prewrite, draft, revise, and proofread. (p. 29)

In light of the changes in students' instructional tasks and the mandate from the MSDE to incorporate the writing process into the repertoire of instructional methods, it is not surprising that teachers and administrators said that writer's workshop was an instructional change that came about in response to the MSPAP. The third-grade teachers at School B described one way they integrate the writing process into their thematic units:

> There are usually one or two major writing activities to go with each unit. In the mystery unit we do the major writing of a mystery story, and they [the students] start with planning and thinking— what they're going to write—and then they go through the whole writing process, doing a rough draft, peer editing, teacher editing, final copy, and making a cover.

While not all items on the MSPAP involve the writing process directly, assessment items in all subject areas are followed by writing prompts. For example, after students have performed a science experiment, a problem-solving task in mathematics, or have completed reading a narrative, they are supplied with a writing prompt that tells them what form their written communication should take. They might be asked to write in the style of a business letter, a friendly letter, a diary entry, or a report. They are told the intended audience, the topic of the writing, and the purpose of the communication. These prompts are often long and complicated. So, the teachers at School B not only let their students take some of their writing completely through the writing process but have included instructional methods that help students understand writing prompts. While such direct instruction is not provided for students, all the teachers said their repertoire of instructional methods included instruction in the writing process.

Integrated instruction. Teachers' instructional methods were also affected by the MSPAP in that nearly all schools had begun to integrate their instruction across the entire curriculum. One supervisor of instruction even explained that their county was moving toward integrated instruction even at the high school level. The link between integrated instruction and the MSPAP is not stated in the Reading or Writing Outcomes. It may, however, be linked to an outcome that addresses the need for

students to read not only for the literary experience but for other purposes as well:

> Students will demonstrate their ability to vary their orientation to the text by interacting with a variety of texts for different purposes. Students will read for literary experiences (novels, plays, short stories), to be informed (content texts, articles, editorials), and to perform a task (follow directions, some action required of students). (p. 21)

On the MSPAP, this reading outcome may occur during a science experiment or a mathematics problem-solving situation. Thus, the reading outcome and the nature of the assessment itself may have combined to produce the changes in instructional methods. A fifth-grade teacher at School B describes the way their team has integrated their instruction:

> In the first quarter, everything was instructed around the environment, "Our World." The kids read nonfiction as well as fiction about the environment, and I placed my students [into groups] so that they were looking at a particular issue. Whether it be acid rain, whether it be rain forest, whether it be recycling, reusing, we did science experiments in language arts; we collected data in language arts; we collected data in math. Everything tied together. The best part was hearing one of my students say, "I don't know if I'm in math or language arts." That was the best comment.

This method of instruction is quite different from using thematic units. Thematic units imply that all of the literature-based assignments are related to the same topic, but the theme may not carry over into other subject areas. By using integrated teaching methods and thematic, literature-based instruction, these teachers base their entire curriculum on a common theme.

Texts Used in the Classroom

The third type of instructional change was the emphasis on using authentic literature rather than the more traditional basal readers. These basal reader series structured the entire curriculum for teaching reading and provided all of the necessary materials for implementing the program (Otto, Wolf, & Eldridge, 1984). Not surprisingly, the design of a basal series has been found to influence the type of instruction that teachers provide for students (Barr & Sadow, 1989). Thus, in those schools using basals, students were taught to read by having a controlled number of words introduced to them at a time. Because it is difficult to find authentic pieces of literature that use a limited number of new words, stories in basal readers were often contrived. Researchers theorized that the simplistic language patterns and limited vocabulary of these readers might have adverse effects on children's language development (Chall & Squire, 1991). In response, publishers began including authentic literature within their basal reader programs, but often would alter the original text to comply with readability formulas and space limitations (Chall & Squire, 1991).

More recently, publishing companies have developed "literature anthologies" that are made up of authentic literature and include the entire text, along with reproductions of the

original illustrations (Kucan, 1994). This type of basal reader was used by most of the teachers (other than the teacher of the gifted and talented) at School A. The other schools used authentic literature—also called "trade books" or "novels."

The teachers and administrators we spoke with were well-informed about the rationale behind the use of authentic literature. The third-grade teachers at School D noted the problems they saw with the more traditional basal readers after they had made the switch to authentic literature:

T1: After we'd gotten into the trade books, we started to see what was missing from the basals.

T2: . . . the quality of the literature . . .

T3: The kids were much more enthusiastic.

T1: Plus, we found that they [the publishers of basal readers] would water down stories in the basal. They would take an excerpt from a story and put it in the basal and when you compared it to the real story they would water it down and leave out the good language.

The curriculum coordinator at School E explained further:

> Whole texts are being used instead of short little excerpts to teach reading. I think grade schools don't look as much to exposition. The MSPAP probably has moved us more to make sure that we're focusing on that too.

She notes that not only has the MSPAP influenced instruction by encouraging that longer, authentic texts be used, but that texts used during instruction are no longer exclusively narrative. Administrators and teachers at all schools noted this change.

The role of the MSPAP in evoking change may be related to the fact that the assessment itself does not use the typical short isolated paragraphs that traditional standardized tests use as texts in assessing reading ability. Instead, the MSPAP offers lengthier, authentic texts bound together into a booklet known as the "Student Reading Book" (Maryland State Department of Education, 1991). In accordance with the Reading Outcomes of the Maryland School Performance Program (1991), a variety of texts are used on the MSPAP (e.g., plays, short stories, content articles, editorials, recipes) as well.

Changes in Learning Environment

Another substantial instructional change has been the way in which students, teachers, and parents are involved in classroom learning. Although the quality of the learning environment depends on the instructional changes already discussed, the term "learning environment" implies the *totality* of the learning situation as opposed to its component parts. That is, the tasks performed by students and the methods used by teachers both contribute to the academic conditions that create a learning environment, which can be viewed as an aggregate of social, cultural, and academic conditions that influence the learning experience for a given individual. The effects of the MSPAP,

then, extend beyond student learning; they affect teachers and parents as well.

Students. Across all schools, teachers and administrators reported that the learning environment had changed because students were given more voice in how lessons evolved. Students also had been given more choice in classroom learning. The supervisor of instruction at School D described the effect of this change on students:

> I think the whole atmosphere of a classroom—the learning climate—is important. Since you are doing so many more activities that are more student-facilitated than teacher-directed, then you are much more likely to have a classroom atmosphere that might appear to a casual observer to be noisier and less focused, but in reality on closer inspection you are seeing lots and lots of different learning all at once. For many children, having the opportunity for the first time to make choices, and have the freedom to make choices in what they do—within certain bounds and certain standards—will be accepted.

The supervisor's perceptions were verified by the fifth-grade teachers at School D. (Note that these are the same teachers who were frustrated by the sudden changes they were expected to make.) Here, they note the positive effects that changes in the learning environment produced:

T1: In the past, in other schools a supervisor or principal would say, "We expect you to have the other kids working on assignments or dittoes or a workbook when you're working with a reading group." They [the students] had to be silent, or quiet, and do exactly what you told them to do. The kids now have more choice. There are structured things they have to do, but they are starting to see that you can choose to read, and you can choose to write, and you can choose to do it without being directed to do it.

T2: I am seeing the possibility of more choices now. Whereas in the past it was, "my way or the highway." If I want a bunch of kids to read a chapter from their current book, they can decide whether or not they want to read it on their own, or read it with two other people, or read it out loud, or read it silently.

The other change that all schools noted was the increase in student interaction and involvement in the lessons. The fifth-grade teachers at School E highlighted the fact that if students' roles in the learning environment were to change, the teacher had to permit the social rules that govern classroom instruction to be altered (italics added for emphasis):

> I think the one important thing that I found to be very helpful in my classes is to *allow* the students to have the opportunity to have input into how we should do a lesson—student involvement.

Comments by a third-grade teacher at School D also show that student interaction in the learning environment is a change from the past:

> Children [are] helping other children. It is really funny because I remember in the old days when you would say talking wasn't

> allowed, and the children were not allowed to help each other—and now we see that life isn't like that. You have to know how to work with people and ask for help . . . Just in the last few years it has been so much better because they are not sitting there with "fences" around their work—people don't live like that.

Although nothing in the Reading Outcomes of the MSPP accounts for the increases in student involvement, the MSPAP assessment itself may have induced such change. The MSPAP provides opportunities for students to work cooperatively in groups during portions of the test and also allows for student choice within the assessment (Maryland State Department of Education, 1991; Field observation of 1992 MSPAP administration, May, 1992). Based on these comments and the format of the MSPAP, it seems that not only has the assessment altered instruction, it has changed the way students behave in their learning environment as well.

Teachers and administrators. Just as students' roles appear to have been affected by the MSPAP, so too have the roles for teachers and administrators. Not surprisingly, if students are being provided with greater opportunity for decision making and choice, then teachers must be relinquishing some of that power. The teachers and administrators in all five schools support the notion that teachers are shedding some of their more traditional roles and functioning more as coaches and facilitators than as authority figures. The curriculum coordinator at School E noted that during literary discussions, teachers are relinquishing the more traditional role of inquisitor so that student interaction can occur:

> [The MSPAP has] geared our teachers to let kids respond in response groups so that there is more interplay among kids, and teachers [are] taking a "stand back" role and letting kids get into the discussion.

Administrators have also changed their roles in creating learning environments; they have had to be supportive and allow teachers to become risk takers. The comments of the principal at School C substantiate this role:

> I go to the business of being the supportive force—allowing for creativity and risk taking. I know resources are important, and you want them there, but it [change] can be done without all those resources too. It *has* been done, but I think the more important thing is the support for school [staff]—to let them identify their needs and to see how they feel they can meet those needs and give them a chance, to be accountable, but to give them a chance to see if they can develop their plan.

The comments of all the administrators reflected the basic tenets of the Maryland School Performance Program's (MSPP) outcome-based approach to school improvement. This document is available to administrators in the Maryland School Performance Program Guide (1991). The Guide describes implementation procedures at the school level and was developed to help administrators implement the suggestions for change made by "The Report of the Governor's Commission on School

Performance" (Sondheim et al., 1989). The introduction to the Guide mirrors administrators' comments:

> School improvement in Maryland is driven by a practical *school-based instructional decision making process*. Each school is the center of instructional decision making for its students. School-based decision making is supported by a RAND Corporation study of 40 years of school reforms (*Steady Work: Policy, Practice, and Reform of American Education*, 1988) which concluded that:
>
> 1. Reforms must take place at the school building level.
> 2. Reform efforts must be given enough time to succeed or fail.
> 3. School staffs must be involved in the design of reform.
> 4. We must not expect quick and easy solutions. Significant and lasting change will take time.
> 5. School solutions may make schools' programs very different.
>
> Each school receives a new professional role with demanding responsibilities. This new role calls for the development of a common vision, data-based decision making, risk taking, creativity, change, and the selection of proven teaching strategies and programs so that each student may succeed. (pp. I-2, I-3)

Recommendation #5 of the Report links directly to the MSPP Guide (1991) as well as to the comments made by the administrators:

> We recommend, as an important step toward school improvement, the elimination of rules, regulations and other strictures that constrain school staffs in applying their professional abilities and creativity to the task of teaching children (p. 4).

All the administrators in this investigation have taken seriously their responsibility for school improvement that these state policies sanction and are ensuring that such changes occur in their schools.

Parents. Many parents and teachers said that an increased emphasis was being placed on involving parents in the learning environment both at school and at home. Third-grade teachers at School E enlisted the support of parents in order to implement a read-at-home program in which students were encouraged to read for at least 15 minutes every night. Parents were asked to document students' efforts and to interact with their children about what they read. Third-grade teachers at School C asked parents to help in the classroom by assisting small groups with library work, art projects, and reading projects.

The reliance on parental support is not a new idea, but in these schools it may be linked to the MSPAP because some parents were concerned about the changes being made in the schools. Parents were raising questions because they were unfamiliar with the tasks students are being asked to do, the methods being used in the classroom, the longer texts their children were being asked to read, and the new roles their children had assumed in the learning environment. The principal at School C explained that the cohesive learning environment she was

trying to create was contingent upon the understanding and support of all involved:

> I guess I always feel that you have the "vision," but it cannot be carried out if you don't have the support of the staff and the community and everybody who's a part of the school. That trust has to be developed. That whole program has to be developed, and I think that is [accomplished] by giving them the responsibility and input so it's a case of the staff, it's also a case of the kid, it's also a case of the parents, and it's the community—it has to be the whole team effort—otherwise it can't be done. How did we go about organizing that? . . . You have to develop that special environment among your staff, and you have to have that common mission and [know] where you want to head, and that's what we worked on first. Then gradually bring in the parent. They have to buy into it [the common mission]. They have to be supportive. Again, everything won't be perfect; but again, the willingness for everybody to talk and to be creative and to be willing to try is crucial. Get parents in here. Let them see what's going on, and let them be involved with it.

In addition to permitting parents to be a part of the learning environment itself, workshops were developed in some schools to educate parents about the new methods of instruction and the rationale behind their use. Several schools sought "Parent Involvement" grant funds to help them educate parents about the curricular changes; School A and School B reported that they had received such grants.

School E organized a similar program of education for parents. However, the principal noted that because many parents are immigrants working at blue-collar occupations requiring shift work, parent in-services had to be staggered throughout the day to accommodate work schedules. Identical sessions were provided in the mornings, afternoons, and evenings so that parents could attend sessions when it was convenient for them.

Including parents in the learning environment and educating them about the changes in the schools cannot be directly linked to the MSPAP assessment or MSPP documents. However, administrators and teachers have apparently realized that if instructional changes are to be understood and accepted by parents, provisions must be made to include parents in and inform them about those changes.

Professional Support for Teachers at the District/County Level and School Level

The instructional changes described above were costly, both in time and money. From the outset, the state of Maryland placed the largest burden for facilitating change on local school systems, as was evident in the Report (Sondheim et al., 1989). Since 23 of Maryland's 24 school systems are organized by county, the term "local school system" includes the county and school levels.

Thus, the local school systems were responsible for providing the professional development programs their teachers needed in order to make the instructional changes requested. The Report justified the inevitable inequities among the school systems as a means of identifying those systems in need of greater support.

Table 4. Sources of Ideas for Change Between Schools and Proportion of Faculty Reporting Sources Within Schools.

	Schools					
Source of Change	School A $n = 2$	School B $n = 4$	School C $n = 3$	School D $n = 5$	School E $n = 6$	TOTAL
Professional Materials						
State	1.00	0.00	0.00	0.00	0.17	0.23
County	0.50	0.50	1.00	0.80	0.33	0.63
School	0.50	0.75	0.67	1.00	0.17	0.62
Professional Development Activity						
State	1.00	0.50	0.33	0.00	0.50	0.47
County	0.00	0.50	0.67	0.80	0.67	0.53
School	0.00	0.50	1.00	0.40	0.50	0.48
Discuss/Share						
County	0.00	0.50	0.33	0.80	0.00	0.33
School	1.00	1.00	1.00	0.80	0.83	0.93
Original Ideas	0.00	0.75	0.33	0.60	0.50	0.44

Much of the burden for implementing instructional change did lie at the local school system level. Four broad categories of sources of ideas for teachers and administrators existed: professional materials, professional development activities, informal discussion and sharing, and original ideas. Table 4 shows the proportion of teachers' and administrators' responses within each school that identified similar sources of ideas for change at the state, county, and school level.

In addition to providing information about where ideas for change were derived, teachers and administrators were asked to describe how these changes were financed. Table 5 shows where the resources for making these instructional changes came from as well as the proportion of responses within each school that corroborated these statements. A more detailed discussion of resources follows.

Professional Materials

Each of the five schools indicated that professional materials (i.e., professional books, curriculum guides, videotapes of instructional methods) helped them develop ideas for mak-

Table 5. Resource Availability and Proportion of Faculty Within Schools Reporting Sources of Resources

Resource	Schools					
	School A $n = 3$	School B $n = 5$	School C $n = 3$	School D $n = 5$	School E $n = 6$	TOTAL
Professional Material						
State	0.33	0.00	0.33	0.00	0.33	0.20
County	0.67	0.20	1.00	0.40	0.67	0.59
School	0.67	1.00	0.33	1.00	0.83	0.77
Professional Development Activity						
State	0.33	0.20	0.00	0.00	0.00	0.11
County	1.00	0.60	0.67	0.80	1.00	0.81
School	0.67	0.60	1.00	0.40	0.83	0.70
Grants						
Federal	Chapter 1	none reported	none reported	none reported	Head-Start/ Chapter 1	
County	Parent Involvement grant	Parent Partnership Grant/Lit. Based Curriculum Grant	Art teacher obtained grant to integrate curriculum	Mini-grant tied to MSPAP	Success for Every Student grant	
School	none reported	none reported	none reported	PTA support/ discretionary funds	none reported	

ing instructional changes. In addition, counties bought many copies of trade books for classrooms; all materials were primarily paid for with county- and school-level funds. Counties were quite helpful in providing professional materials. The reading specialist at School D, for example, said that many of their ideas for change come from a language arts guide:

> Most of the ideas [for changes] come from the county level where we have been given the guidance from the committee working on, or developing an Integrated Language Arts Guide. This [guide] is directly in line with MSPAP.

Additionally, professional books were available at either the county or the school

level. Teachers and administrators at several schools said they could order from a professional library in the county. The curriculum coordinator at School E said the principal had ordered many professional books for each member of the faculty:

> We bought all of the Heinemann books. I've got *Invitations*, I've got *Lasting Impressions*, we've got *In the Middle*—and the teachers have them too. We've got all the stuff on graphic organizers [that the principal] ordered from the state and paid for herself, and had them all laminated so every teacher has their own set of those. Anything that I put on the list that we want, we get multiple copies of . . . *Lessons from a Child*, all of the stuff on the writing process . . . .

Thus, it seems that access to professional materials was needed—and it was provided—in order for teachers and administrators to make mandated instructional changes.

Professional Development Activities

A great deal of support was also needed in the form of professional development activities, including teacher in-services, workshops, and model lessons. These activities were provided primarily at the local level, but the state supported some through the Maryland State Department of Education. Two fifth-grade teachers at School B said they developed many ideas as a result of their participation in the Governor's Academy of Mathematics and Sciences one summer. The Governor's Academy was begun in the summer of 1989 as a means of educating exemplary teachers of mathematics, science, and technology across the state. It was funded as a start-up project that was operated by the Maryland State Department of Education in which teachers learned about instructional innovations as well as current content area research and theory. The teachers of School B said their experiences helped them see more clearly how integration might occur:

> Last summer [another fifth-grade teacher] and I attended the Governor's Academy of Mathematics and Sciences, and we began to see a clear picture from that—being immersed in math and science and writing outcomes and the different themes and the different ideas . . .

Other activities provided by the state were available at School A in the form of university-provided programs. Although not funded directly by the state, university-based programs provided by the University of Maryland were categorized as professional development activities provided by the state because the university is a state agency.

Much of the expertise for providing ideas for change appeared to be available at the county level for each school. The principal at School D explained that their county had developed MSPAP curriculum specialists who were available to work with teachers in the county:

> We spent a lot of time with our MSPAP teachers here in the county. We did modeling lessons for teachers. We released teachers here for direct instruction with those folks so they could simply talk to them and learn. We had county-wide inservice meet-

> ings as well. We have sent our folks to as many workshop meetings as we could afford to have them go to.

Finding time to instruct teachers seemed to be particularly difficult; however, these administrators shared some of the innovative ways they managed to do it. At School B, the principal described how she got teachers released:

> I came up with really interesting ways to release teachers and get them out of the building because I really do feel that although they shouldn't be out of the classroom, they need to be inserviced. First of all I use teachers in the building with expertise to mentor the ones that are available . . . . The assistant principal and I go in and we teach classes so that these teachers can be released. There are some specialists who don't have class at [a given] time—we'll say, "Will you help out?"

At School C and others, they also had release days from the central office for working on professional development. Thus, the administration at the county and school levels did provide the necessary staff development to keep faculty updated on theories and methods for making changes.

Informal Discussion and Sharing of Ideas

Teachers also got ideas from informal discussions and sharing with others; the opportunity to share and discuss ideas was most available at the school level. The difficulty was finding time to do it. The principal at School E explained the unique "block planning sessions" that occurred in her school:

> The teachers have 3 hours and 45 minutes off during the student day in a student week [for planning]. So sometime between Monday and Friday all of them have block planning, and that's not an unusual thing in elementary schools, but I've used the curriculum coordinator [within the school] who has a doctorate in reading to meet with them for 45 minutes every other week and plan. Her [the curriculum coordinator] job is to sit and act as a curriculum specialist in the field of reading. She'll bring in reading; she'll bring in writing, oral language skills. She's full of suggestions. She'll maybe [share] materials that have come in, or [provide] suggestions on how to use graphic organizers, or she may introduce a new graphic organizer. She acts as a catalyst and teachers will sit and talk about the things they've done.

This opportunity for constructive dialogue and planning is certainly ideal. Each of the other schools seemed to have an equivalent support system in place. At School D for instance, the reading specialist noted that they have an Integrated Language Arts Support Group. Additionally, some schools gave teachers chances to discuss ideas with county supervisors. The fifth-grade teachers and the reading specialist at School B said their talk with supervisors enabled them to seek information about new ideas and to see if others could be tried. They were excited about the support they had received when they wanted to try to completely integrate their curriculum:

T1: I remember sitting there [at lunch] talking to the math supervisor and we said, "But you can't get everything in. We're going to have to change some minutes along the line." [Our science supervisor] said, "That's no problem." And I think that was like a signal to us . . .

T2: . . . that we had full support.

T1: Right, it was like they said "Go ahead and try it!" It's not like OK we've got this county curriculum and that kind of thing. [Like] we have to teach "X" amount of minutes for this . . . and we're saying, "Look, we want to try something, but we're going to have to change the way the county's thinking."

T2: . . . All three of them [county supervisors] . . . it was like a blank slate they gave us.

Thus, it seems that not only was the opportunity to share ideas with other teachers important, but the support of the county supervisors was important for the discussion and sharing of ideas as well.

Original Ideas

Many of the teachers and administrators said they had to develop many of their instructional ideas on their own, both at the level of a single lesson or for an entire curriculum. For example, the fifth-grade teachers at School B who wanted to totally integrate their curriculum described how they came up with their ideas:

T1: We cut and pasted it [the curriculum] to meet what we thought would be our needs.

T2: We got the OK to change the scope and sequence and to move different units around.

The principal at School B explained that because she encourages creativity and risk taking, teachers are willing to try new ideas. She also noted that many of her own ideas come from assessing the needs of her students:

> I just make them [ideas] up. I was a reading specialist for nine years. Where do I get ideas? Well, I guess I get them from needs assessment. We go around and you look at your school, and you think. I'll pick out two or three areas to prioritize, and then I come up with ideas and they [the teachers] all buy in. The staff pretty well buys into most of them because they'll come up with them too. I think if you encourage creativity and risk-taking, people will come in here and say, "Hey, can I try this?" Like [one fifth-grade teacher] came and said, "Can I teach Science and Social Studies all day if I integrate all my other subjects [reading, language arts]?" And I said, "Yeah, that's great!" So we threw the schedule out. We don't teach by minutes any more, by block of time—can't do that. So, how do we come up with ideas? Why we just sort of brainstorm, and think about them, and read—I read articles all the time. I listen to the needs of the kids in the school.

Thus, it seems that the county and school levels have played a major role in financing instructional changes. They have funded professional materials, professional development activities, and have provided opportunities for teachers to discuss and share their ideas. Building administrators have played an important

role in securing additional funds to purchase materials through grants (see Table 5). Likewise, the administrators played a key role in organizing and planning so that teachers could either plan together during the school day, as in the block planning sessions at School E, or outside the school day. Through a concerted effort between county administrators, school administrators, and teachers, these schools combined their resources to share ideas in order to make their new curriculum work.

Affective Changes in Students' and Teachers' Behavior

The third category of change in these schools dealt with the impact of the instructional changes on students and teachers. Three types of effects became apparent: effects on emotional state, motivation/attitude, and student classroom behaviors.

Emotional State

Teachers in several schools described the emotional effects on students primarily in terms of how they would be affected by the test after the instructional changes were put in place. Several thought that students would feel more comfortable with the test since many of the items on it would reflect typical daily instruction.

The primary emotional effect, however, was on the teachers. Most admitted that the test, and the instructional changes required as a result of it meant frustration for them. Many teachers noted that they were nervous and even frightened by the test. One individual at School E said:

> We had so many training sessions [in preparation for the MSPAP] and one outcome, and I am not sure that it was very positive, was the anxiety that was expressed by the teachers in not knowing exactly how the results would be reported, and I think that they felt a degree of guilt or worry in what this would mean for them as teachers if the results were negative for School E.

Perhaps the fact that these were state-mandated changes that were being implemented quickly brought about such anxiety. However, while many of the teachers expressed their frustration, they felt that the changes were necessary nonetheless:

T1: They are good changes, and we are heading in the right direction there is no doubt about it. It is just frustrating.

T2: Our problem is that we want to get there, and we know we *can* get there, and we want to get there *now*.

Student Motivation and Attitude

All schools, except School A, reported positive effects on students' motivation and attitude toward reading and writing. These views were consistent across schools. However, it must be noted that these changes in motivation and attitude are based on the reports of *teachers*, not students. The fifth-grade teachers at School D seemed to attribute this in-

creased motivation to the use of authentic literature:

T1: One thing with the novel approach [literature-based instruction], the superiority of that is the children get to see a character develop throughout the whole story. By the end of a book, my children are so enthused about finishing it.

T2: I can say that within the 20 years, not counting these [past] three years, I have been doing literature, I don't think I ever had kids who really liked to read in reading class because the books stunk.

T3: Now they can't wait to read out of those books!

T1: They love to read now. They were reluctant once.

Teachers at several schools also reported a change in students' attitudes toward reading, but seemed to attribute the change, in part, to the different learning environment that was established. Likewise, they attributed part of the changes to such things as providing students with choice. The comments of the reading specialist at School D support this perception:

> I see a difference when [the students are able to] choose. It is in the attitude, and that is one of the areas that MSPAP addresses; the attitude toward the language arts is more positive, because it is something they *choose* to do at times rather than always being *dictated* to during this time.

As was noted earlier, one of the Reading Outcomes of the Maryland School Performance Program (1991) was that, "Students will demonstrate positive attitudes towards reading a variety of texts" (p. 21). Based upon the evidence above, teachers, apparently think this has happened.

Many of the schools also indicated that positive attitudes were displayed toward writing as well. The third-grade teachers at School D described how students' motivation for writing has been positively influenced: students are more confident in their writing as their motivation has increased:

T1: I think that [the students] are feeling more self-confident. They are feeling like they are more successful.

T2: They want to read, and they want to write. They come in [and say], "Look what I did!" At recess they say, "Can I stay in the room and write?"

T3: Yes, they say, "Can I stay in the room and write?"

T2: I don't remember that they said things like that in years past.

The third-grade teachers at School C expressed similar delight at their students' increased motivation for writing:

T1: I know there's been a positive impact with our program when we do our journals. In the past, if you gave them a journal starter they completed it with a sentence. Now they

> go pages and pages and pages and pages and they just keep going and going. And they don't have to—it's not getting a grade—they're never graded, they're checked. So, they must be doing it from their own self-motivation. You'd think they'd write one sentence, put the pencil down and be done, but they go on and on and they illustrate it.

T2: They [the students] love the novels. Writing is so natural. There aren't any more groans or, "Oh, here we go again, a story . . ." It's just like part of the routine. You brush your teeth every day, you eat lunch every day, you write every day. They don't know any different. This is life; you write every day.

Student Behavior

Teachers also reported changes in students' academic behavior, although there was little continuity across schools in terms of types of changed behaviors. The teachers and principal at School C noted that students' thinking skills had improved:

> Their thinking skills are better as is their creativity. You're pulling things out of some students that you wouldn't get any other way. This way they all have to have some kind of input, and you learn that it's not always your smartest students that have the best answers.

This type of observation is in line with recommendations from "The Report of the Governor's Commission on School Performance" (Sondheim et al., 1989):

> Some of the data available in schools would be collected, analyzed and used by every superintendent and local board to decide what actions are necessary for each child to learn and make progress. This is particularly crucial at the primary and elementary levels, but it is important at every level of schooling (p. 13).

Based on this statement, some counties have adopted "Success for Every Student" as the motto of their educational system. The third-grade teachers from School C felt that every child should be given the same opportunity to experience a solid program of instruction in which they can display what they know.

The third-grade teachers at School B identified specific literary behaviors as improved among their students:

> I think they're learning about literature. They're learning how to look at it from all different perspectives, and they're learning that they can find, if they're interested in a particular book, or interested in an author, there are places to find more to read.

These comments imply that through the increased use of authentic literature and exposure to literary criticism at an elementary level, students are becoming more adept at reading from a literary perspective.

The fifth-grade teachers at School D felt that their students had become more independent and self-directed in their learning because of the curricular changes:

T1: I think they are becoming more self-directed learners because of this.

T2: I think it leads them to be more independent workers and be better problem solvers with other members of their group, and independently on their own.

Teachers in several schools noted that because the learning environment had changed, classroom conduct had improved and behavior management problems had subsided. The third-grade teachers at School C noticed a substantial change in their classrooms:

T1: There is a lot of movement, activity, you have to close your door. The noise level is so high, but if you're walking around and listening to the conversations it's all related to the project at hand. They're really into it, and they're all discussing it, and that's fine, and we like that.

T2: We eliminate a lot of behavior problems because they're talking. It's not, "Shhh, no talking allowed." They're communicating and when it's time to get busy and work they've already got it all our of their system, and they get to work. The whole behavior management system has changed for the better.

The fifth-grade teachers at School D corroborated these observations, attributing the decrease in behavior problems to the fact that students had greater ownership of the instructional activities that they were participating in:

I have found that when working with another reading group, and they are doing independent seatwork, since they have greater ownership in a lot of ways with what they are doing, and more investment in it, I don't have the discipline problems that I used to. When it was just giving them dittoes and saying, "Here do these" they weren't as intrigued. They weren't as interested because they weren't relevant. Consequently, I'd have to keep pulling students out of the group and disciplining more. Now my children are more self-directed. There are a few who will lose their attention span and maybe talk inappropriately, but it is so much less than it used to be. There might be more of a "buzz" in the room, but it's OK because it's productive.

Overall, it seems that although the MSPAP may have made teachers feel frustrated and anxious, the instructional changes brought about by the MSPAP seems to have had very positive effects on students' motivation and attitude toward reading and writing. Instructional changes may have also produced positive effects on students' academic behavior as well as their classroom conduct.

CONCLUSIONS

In this study, evidence showed that the Maryland School Performance Assessment Program has produced consistently positive effects on classroom practice. While there are substantial data to support this claim, we cannot claim wide generalizability of these findings because our informants worked in elementary schools that had been deliberately selected as exemplars of instructional change. Thus, conclusions should be considered relevant to those school communities.

The evidence suggests that the types of instructional tasks, methods, materials, and learning environments were altered by teachers

and administrators. These alterations seem to reflect the nature of the MSPAP assessment itself and the state-mandated outcomes for literacy. However, it may also be that the assessment was designed to conform to instructional practice. In any case, the comments by school personnel suggest that instructional alterations did occur in these schools. More specifically, instructional tasks were altered to give more writing opportunities, to emphasize personal response to reading, and to include student choice in such literacy tasks. Additionally, the instructional methods employed by teachers included thematic, literature-based instruction, writer's workshop, and integrated instruction. The use of authentic texts was also clearly present in these schools. Finally, the classroom learning environments reflected more student input and interaction during lessons and a less dominant role for the teacher.

In order to produce such change in their classrooms, teachers had to participate in the design of the curriculum. Likewise, the teachers had to be willing to abandon incompatible methods of instruction and ideologies for new ones. The potential for tension between faculty and administration in such a situation is obvious. Thus, instructional change also required major efforts in terms of administrative support at the district/county level and the school level. Substantial support in these schools was provided through the purchase of professional materials that would describe the theoretical basis for the desired changes as well as practical methods for doing so. Additionally, professional development activities such as in-services, demonstration lessons, and workshops were essential for change. Teachers also reported that time for discussion and sharing of ideas with county officials and colleagues was invaluable.

The principal's role was critical in reducing tension. Principals who were actively involved with the instructional changes created environments in which common goals were established and creativity and risk-taking were encouraged. Teachers felt supported in their efforts. Given the enormous financial burden placed on local education agencies, principals were also critical in schools' efforts to secure external grant funding. This additional funding provided schools with some of the materials needed for achieving change that otherwise would have been unavailable to them.

By teachers' accounts, the instructional changes brought about by the MSPAP have had positive effects on students' motivation for reading and writing. Additionally, teachers reported positive effects on students' attitudes toward literacy and on their academic behavior. Although the pressures of altering their curriculum produced frustration and anxiety, teachers were pleased with the changes being made and felt that the changes were worthwhile, given the positive effects on students. Similarly, they reported that although planning for instruction was now more time-intensive, they enjoyed teaching more. Thus, it seems that based on the evidence in interview comments and state documents, positive instructional and affective changes have resulted from the introduction of the MSPAP as a statewide accountability instrument and these changes are consistent with the goals of the statewide program.

CONCERNS AND FUTURE RESEARCH DIRECTIONS

Many concerns should be considered when implementing a statewide performance assessment such as the MSPAP. One is the problem of holding students responsible for knowledge that they may not have had a fair chance to acquire, given the inequitable circumstances of various schools and districts (Porter, 1993). However, according to "The Report on the Governor's Commission on School Performance" (Sondheim et al., 1989), the ultimate goal of the school accreditation aspect of the MSPP is to identify schools that are unable to provide the necessary services for instructing their students and give assistance at the state level.

Concern about such state-mandated action feeds the argument that the demand for such curricular reforms places too much weight on accountability to achieve desired educational reform. Similarly, some have contended that such curricular reforms, in their efforts to bring quality education to all students, employ governmental influence and coercion as a means of achieving change at the expense of democracy (Capper & Jamison, 1993; Shannon, 1991, 1993). Mehrens (1992) has also warned that if performance assessments are used for accountability purposes, as in Maryland, they may face many of the same problems that traditional norm-referenced, standardized tests have faced. All of these are valid issues that warrant consideration when interpreting the results of any investigation of the consequences of a state-mandated assessment on instructional practice or when making policy and instructional decisions.

Although this investigation provided substantial support for the premise that instructional change has resulted from the MSPAP, the results are based primarily upon interview comments from teachers and administrators. More intensive studies that document instructional changes and link them to indicators are needed. Such investigations would provide converging sources of evidence from observations, field notes, videotapes, and interviews with teachers, administrators, *and* students regarding the types of changes and the effects of such changes that result from high-stakes performance assessments.

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APPENDIX

Time Line of Data Collection Procedures

April 17, 1992	Initial contact with Dr. Robert Gabrys, Assistant Superintendent for School Performance, Maryland State Department of Education (MSDE) gaining permission to access information collected and analyzed by MSDE regarding the Maryland School Performance Assessment Program (MSPAP).
May 1992	Exploratory phase of the research: • Drafting of teacher interview questions • Classroom observations of the MSPAP being administered • Piloting of teacher interview questions and procedures
June 1992	Transcription and coding of pilot interviews. Revision of interview questions based on exploratory research.
June 25, 1992	Initial contact with Assistant Superintendents of Instruction in each of the 24 Maryland public school systems requesting their assistance in identifying one or more representatives from their school district who were knowledgeable about the ways reading instruction in the elementary schools may have changed as a result of the MSPAP.
August 27– October 29, 1992	County Supervisors from 21 of the 24 Maryland public school systems interviewed in order to describe how instruction in their county has changed as a result of the MSPAP and in order to nominate elementary schools within their district that were making changes in response to the MSPAP attempted in each school nominated categorized. Five schools selected for inclusion in school-based interviews.
November 1992	County interview data condensed and types of innovations attempted in each school categorized. Five schools selected for inclusion in school-based interviews.

November 12, 1992- January 19, 1993	County Board of Education offices and five research sites contacted in order to gain permission to conduct school-based interviews with building administrators, reading specialists, and third- and fifth-grade teachers in each of the five elementary schools.
January 7, 1993	Data collection at School E, interviewed:
8:30- 9:15	Former Curriculum Coordinator of school
9:15-10:00	Third-grade teachers (3 teachers)
10:00-11:00	Fifth-grade teachers (5 teachers)
11:00-11:30	Current Curriculum Coordinator of school
12:00-12:30	Reading Specialist in school
January 14, 1993	Data collection at School E, interviewed:
9:30-10:30	Principal of school
January 25, 1993	Data collection at School A, interviewed:
10:00-10:45	Principal of school
10:45-11:30	Third-grade teachers (2 teachers and Gifted & Talented teacher)
11:30-12:15	Fifth-grade teachers (2 teachers)
February 4, 1993	Data collection at School B, interviewed:
8:45- 9:15	Assistant principal of school
9:30-10:30	Fifth-grade teachers (3 teachers)
10:30-11:30	Third-grade teachers (2 teachers)
11:30-12:30	Reading Specialist in school
12:30- 1:30	Principal of school
February 25, 1993	Data collection at School D, interviewed:
10:00-10:30	Reading Specialist in school
10:30-11:15	Fifth-grade teachers (4 teachers)
11:15-12:00	Third-grade teachers (6 teachers)
12:00-12:15	Supervisor of Instruction
12:45- 1:15	Principal of school
March 26, 1993	Data collection at School C, interviewed:
10:00-10:45	Third-grade teachers (2 teachers)
10:45-11:15	Fifth-grade teachers (2 teachers)
11:15-12:00	Principal of school

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